

WHAT IS CLAIMED IS:

1. A method for providing redundancy for a card in a chassis, the method comprising:
  - providing first and second cards in a chassis, each
  - 5 card having an output node connectable to a common bus and each having a respective input node;
  - providing a facilitator card in the chassis, the facilitator card having an input node connectable to the common bus and an output node connectable to the input
  - 10 node;
  - connecting the input node of the second card to the output node of the redundancy facilitator card; and
  - connecting the input node of the first card to the associated output node of the first card, thereby
  - 15 coupling the input node of the first card to the input node of the second card to provide redundancy for the first card.
2. The method of Claim 1, wherein connecting the
- 20 input node of the second card to the output node of the redundancy facilitator card comprises connecting the input node of the second card to the output node of the facilitator card by a cable.
- 25 3. The method of Claim 2, wherein the cable is an amphenol twenty-five pair cable.
4. The method of Claim 1, wherein connecting the
- input node of the first card to the associated output
- 30 node of the first card comprises connecting the input node of the first card to the output node of the first

card after determining that a failure has occurred in the first card.

5        5.    The method of Claim 1, wherein the first card  
is a line card.

6.    The method of Claim 1, wherein the first card  
is a network interface card.

10       7.    The method of Claim 1, wherein connecting the  
input node of the second card to the output node of the  
facilitator card comprises connecting the input node of  
the second card to the output node of the redundancy  
15       facilitator card by a cable and a pair of interface  
connectors, the interface connectors disposed on a  
backplane of the chassis.

20       8.    The method of Claim 1, wherein the first and  
second cards each comprise circuitry operable to perform  
a desired telecommunication function and wherein the  
first and second cards each comprise a switch operable to  
selectivity connect the input node of the card to either  
the output node or the circuitry of the card.

25       9.    The method of Claim 1, wherein connecting the  
input node of the second card to the output node of the  
facilitator card further comprises connecting the input  
node of the second card to a first interface connector  
located on a backplane of the chassis and connecting the  
30       output node of the facilitator card to a second interface  
connector located on the backplane.

10. The method of Claim 9, wherein connecting the input node of the second card to the output node of the facilitator card further comprises connecting the first  
5 interface connector to the second interface connector by a cable.

11. The method of Claim 10, wherein the cable is a twenty-five pin amphenol cable.

12. The method of Claim 9, wherein connecting the input node of the second card to the output node of the facilitator card further comprises connecting the first  
15 interface connector to the second interface connector by conductors formed on the backplane.

13. The method of Claim 1, wherein a portion of the common bus is formed on a backplane of the chassis.

14. A method for facilitating testing of subscriber lines, the method comprising:

providing first and second cards in a chassis, each card having an output node connectable to a common bus and each having a respective input node;

providing a test card in the chassis, the test card having an input node connectable to the common bus, an output node, and test circuitry;

connecting the input node of the second card to the output node of the test card;

connecting the input node of the first card to the associated output node of the first card; and

connecting the input node of the test card to the test circuitry, thereby coupling the input node of the first card to the test circuitry.

15. The method of Claim 14, wherein connecting the input node of the second card to the output node of the test card comprises connecting the input node of the second card to the output node of the test card by a cable.

16. The method of Claim 15, wherein the cable is an amphenol twenty-five pair cable.

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17. The method of Claim 14, wherein the first card is a line card.

18. The method of Claim 14, wherein the first card is a network interface card.

19. The method of Claim 14, wherein connecting the input node of the second card to the output node of the test card comprises connecting the input node of the second card to the output node of the test card by a cable and a pair of interface connectors, the interface connectors disposed on a backplane of the chassis.

20. The method of Claim 14, wherein the first and second cards each comprise circuitry operable to perform a desired telecommunication function and wherein the first and second cards each comprise a switch operable to selectivity connect the input node of the card to either the output node or the circuitry of the card.

21. The method of Claim 14, wherein connecting the input node of the second card to the output node of the test card further comprises connecting the input node of the second card to a first interface connector located on a backplane of the chassis and connecting the output node of the test card to a second interface connector located on the backplane.

22. The method of Claim 21, wherein connecting the input node of the second card to the output node of the test card further comprises connecting the first interface connector to the second interface connector by a cable.

23. The method of Claim 22, wherein the cable is a twenty-five pin amphenol cable.

24. The method of Claim 21, wherein connecting the input node of the second card to the output node of the test card further comprises connecting the first interface connector to the second interface connector by  
5 conductors formed on the backplane.

25. The method of Claim 14, wherein a portion of the common bus is formed on a backplane of the chassis.

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26. An apparatus comprising:  
a chassis having a plurality of slots and a backplane;

first and second telecommunications cards disposed  
5 in respective ones of the plurality of slots, the first  
and second cards each having:

an input node;  
an output node;  
card logic; and

10 a switch operable to selectively connect the  
input node of the card to either the output node of  
the card or the card logic;

a facilitator card disposed in one of the plurality  
of slots, the facilitator card having an input node, an  
15 output node, and a first connector operable to connect  
the input node of the facilitator card to the output node  
of the facilitator card;

wherein the backplane comprises a bus connected to  
the output nodes of the first and second cards and the  
20 input node of the facilitator card; and

a second connector connecting the output node of the  
facilitator card to the input node of the second card.

27. The apparatus of Claim 26, wherein the second  
25 connector comprises a cable.

28. The apparatus of Claim 27, wherein the second  
connector further comprises a pair of interface  
connectors.

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29. The apparatus of Claim 26, wherein the second connector comprises an amphenol twenty-five pin connector.

5 30. The apparatus of Claim 26, wherein the first connector comprises a switch.

10 31. The apparatus of Claim 26, wherein the first connector comprises a conductor connecting the input node of the facilitator card to the output node of the facilitator card.

15 32. The apparatus of Claim 30, wherein the facilitator card further comprises test circuitry and the switch is further operable to selectively connect the input node of the facilitator card to the test circuitry.

33. The apparatus of Claim 26, wherein the first and second cards each comprise line cards.

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34. The apparatus of Claim 26, wherein the first and second cards each comprise network interface cards.



35. An apparatus comprising:

a first card disposed in a chassis, the first card having an input node and an output node;

a second card disposed in a chassis, the second card having an input node;

a means for selectively connecting the input node of the first card to the output node of the first card; and

a means for connecting the output node of the first card to the input node of the second card.

36. The apparatus of Claim 35, wherein the first and second cards each comprise a line card.

37. The apparatus of Claim 35, wherein the first and second cards each comprise a network interface card.